#### LINCOLN CITY/LANCASTER COUNTY PLANNING STAFF REPORT

## for January 5, 2005 PLANNING COMMISSION MEETING

**P.A.S.:** West Yankee Hill Acres Community Unit Plan Co. Special Permit #04066, Preliminary Plat #04029

Note: This is a combined staff report for related items. This report contains a single background and analysis section for all items. However, there are separate conditions provided for each individual application.

**PROPOSAL:** A community unit plan and preliminary plat for eight acreage

residential units.

**LOCATION:** West of the intersection of S. W. 98th and W. Yankee Hill Road.

#### **WAIVER REQUESTS:**

- 1. Ornamental street lighting.
- 2. Sidewalks.
- Street trees.
- 4. Landscape screens.
- 5. Stormwater Detention.
- 6. Block length.
- 7. Cul de sac length

LAND AREA: 134.07 acres, more or less.

**CONCLUSION:** This is an AG Community Unit Plan, proposing to "cluster" the allowed

dwelling units to eight acreage lots. Waivers requested are typical of a rural subdivision and are provided for in the code. A 20% bonus is

being requested.

RE(	COMMENDATION:	_
Co.	Special Permit #04066	Conditional Approval
Pre	liminary Plat # 04029	Conditional Approval
Wai	ivers	
1.	Ornamental lighting	Approval
2	Sidewalks	Approval
3.	Street trees	Approval
4.	Landscape screens	Approval
5.	Stormwater Detention	Approval
6.	Block length	Approval

## 7. Cul de sac length Approval

#### **GENERAL INFORMATION**

**LEGAL DESCRIPTION:** Lots 5, 12, 15, 19 and 30 IT, in the NE 1/4 of Section 28, T9N, R5E of the 6<sup>th</sup> P.M., Lancaster County, Nebraska. Further described in attached legal.

**EXISTING ZONING:** AG Agriculture

**EXISTING LAND USE:** Farm land/pasture

**SURROUNDING LAND USE AND ZONING:** Agricultural land in AG zoning on all sides. Two Acreages along the county road to the north, two acreages to the east, one farm house is on the west side, one farm house and a private airstrip on the south. This parcel is bisected by the Burlington/Amtrack rail line. A private airstrip abuts on the south.

**HISTORY:** Changed from AA Rural and Public Use to AG Agriculture with the adoption of the 1979 Zoning Update.

**COMPREHENSIVE PLAN SPECIFICATIONS:** The 2025 Comprehensive Plan shows this area as Agriculture and Agriculture Stream Corridor along the stream. Environmental Resource areas are to the south. This is outside the Lincoln growth tiers and just outside the Denton one mile. A cluster is permitted by special permit in the AG district. In relation to clustering the Comprehensive Plan states:

Currently, acreage development has occurred under two development scenarios: AG - Agricultural District (minimum of 20 acres per lot) and AGR - Agricultural Residential District (minimum of 3 acres per lot) with the possibility in both AG and AGR zoning districts of clustering units together in order to preserve more open space and agricultural areas and/or receive additional density bonuses under a community unit development. The complex issue of acreage development and other public objectives requires a large array of land use strategies (pg F 70)

Acknowledge the "Right to Farm" and preserve areas for agricultural productions throughout the county by designating specific areas in advance for rural residential so as to limit areas of potential conflict between farms and acreages (pg F 70)

Retain the current overall density of 32 dwellings per square mile (20 acre) for all agriculturally zoned land. Provide for an ability to divide two 3 acre lots per "40" acre parcel with conditions and administrative review and right of appeal. This would allow more flexibility for parcel size while retaining the overall density and assist in retaining farmable units of land. (F 70)

In determining areas of higher density rural acreage (200 units or more per square mile), numerous factors will be reviewed, such as but not limited to water and rural water districts, soil conditions, roads, agricultural productivity, land parcelization, amount of existing acreages, and plans for urban or town development.

Acreages should develop in areas that best reflect the carrying capacity of that area for acreages. A performance criteria should be developed to review requests for acreage zoning and to determine where these standards can best be met. (F 70)

Development of a performance standard "point system" will allow the location of higher density rural acreage development in either "AG" or "AGR" where the review criteria can be met. This allows equal treatment across the county, maximum freedom of determination of marketing and sale, while locating those developments only in those areas where sufficient "points" can be accumulated to justify the development at the requested location." (F 71)

Environmental Resources: Land and water masses which are of particular importance for maintenance and preservation, such as saline wetlands, native prairie, and some floodway and riparian corridors. Such areas may be either publicly or privately owned.

Agricultural Stream Corridor: Land intended to remain in open space, predominately in agricultural use, but that may also include parks, recreation fields, or parking areas when near future commercial, industrial, or public uses. Such areas will be primarily privately owned, but may also include some public ownership or easements. These areas are mostly in the 100 year floodplain, outside of the existing Lincoln urban development. (F 22)

Riparian, Floodplains, and Stream Corridors – Streams and their adjoining corridors snake their way through much of Lancaster County. Throughout the region, surface water runoff flows into these stream corridors that typically consist of floodplains and riparian areas. These are instrumental in providing habitat and water infiltration benefits, along with serving as connectors to natural areas. (F55)

**UTILITIES:** This is not in a rural water district. Individual waste water treatment and well water is proposed. The groundwater report shows adequate quantity and poor but treatable quality.

**TOPOGRAPHY**: The property is rolling, draining to the north and east.

**TRAFFIC ANALYSIS:** W. Yankee Hill Road is a gravel county road. S.W. 98<sup>th</sup> is a paved county road that connects Denton with Hwy 33 and Crete. The county road system in this area does not follow the section lines. S.W. 112<sup>th</sup> Street and Rokeby Road do not exist abutting this section of land. Due to the natural features, i.e. streams, prairie and environmental resources in the general area, it is not advisable to construct these section line roads.

**PUBLIC SERVICE:** This area is served by Highland (Pleasant Dale) Rural Fire District. This is in the Crete School District # 2. This is in the Norris Public Power service area.

**REGIONAL ISSUES:** Expansion of the acreage areas. Clustering to preserve farm land and floodplain.

**ENVIRONMENTAL CONCERNS:** The Historic and Ecological Resources survey shows no resources on this property. Native prairie is in the area, especially to the south and east. The soil rating is 7.0, on a scale of 1 to 10 where 1-4 are prime ag land. This is not prime land. About 30 % of this parcel is in 100 year flood plain, along the east side. Noise and other

impacts relate to the rail line that crosses this parcel and the aircraft using the private airstrip to the south.

#### **AESTHETIC CONSIDERATIONS:** na

**ALTERNATIVE USES:** All uses allowed in the AG district. Six 20+ acre lots.

#### **ANALYSIS:**

- This request is for a Special Permit for a Community Unit Plan for 8 acreage residential lots. Private, gravel, internal streets are proposed. Individual sewer and water is proposed. A 20% dwelling unit bonus is being requested for preservation of the farm land.
- 2. The flood plain area is about 30% of the parcel and is retained as an outlot.
- 3. This request is in conformance with the Comprehensive Plan.
- 4. As requested by the County Board, no scoring is provided on this application.
- 5. The density calculations for the project are as follows:

134.07 acres at 1 dwelling per 20 acres = 6.70 dwellings 20% bonus requested X 1.20 = 8.04 dwellings

8 dwellings permitted

Requested 8 units on 8 lots

- 6. There is one potentially conflicting farm use, a feedlot located ½ mile east. In addition, there are potential conflicts with an existing oil pipeline, adjacent rail line and an abutting private airstrip.
- 7. This design reflects the normal adjustments to accomplish a cluster style of acreage subdivision through the CUP.
- 8. Waivers are requested for street lights, sidewalks, block length, street trees, storm drainage, cul-de-sac length and screening. These are typical waivers required, provided for and appropriate for agriculture/acreage clusters. Yards are adjusted from AG to AGR standards as part of the cluster.

- 9. The County Engineer's memo of November 18 notes severalissues and corrections.
- 10. The Lincoln/Lancaster County Health Department notes an underground petroleum pipeline crosses the parcel and should be shown on the plan and plat. They note the groundwater reports indicate poor water quality but treatable to meet acceptable quality.
- 11. The length fo the cul de sac is justified in that it serves only 8 dwellings and if and when the outlot is subdivided the length could be reduced with additional streets.

#### CONDITIONS FOR SPECIAL PERMIT #04066:

#### Site Specific:

- 1. After the applicant completes the following instructions and submits the documents and plans to the Planning Department office and the plans are found to be acceptable, the application will be scheduled on the County Board's agenda: (NOTE: These documents and plans are required by resolution/ordinance or design standards.)
  - 1.1 Make the corrections requested by the County Engineer in his letter of November 18, 2004.
    - 1) The maximum grade is 7%. SW 112<sup>th</sup> Court has a proposed grade of 8%.
    - 2) The profile of West Yankee Hill Road shall be extended west to show a minimum of 500 feet of sight distance.
    - 3) The grade of SW 112<sup>th</sup> Court will allow water to run north of the 30" culvert instead of running through the culvert.
    - 4) General Note # 11 refers to SW 112<sup>th</sup> Street which should be SW 112<sup>th</sup> Court.
  - 1.2 Revise the drawing to show the pipeline easement.
  - 1.3 Revise the drawing to show SW 98<sup>th</sup> Street on the Vicinity Map.
  - 1.4 Revise note #14 to include waiver of cul-de-sac length.
  - 1.5 Show the creek and tree masses and indicate which trees will be retained.

- 1.6 Show the adjoining air strip and approach zone as reflected in State Department of Aeronautics records.
- 1.7 Add the community unit plan to the signature block for the Planning Commission.
- 1.8 Add a note to reflect the airstrip activity and the normal overflights and noise.
- 1.9 Show the minimum opening elevation for each dwelling.
- 1.10 Revise outlot A to reflect a public access easement, not a common access easement.
- 1.11 Revise outlot "A" to provide a future access to Outlot "B" to the south.
- 2. This approval permits 8 single family lots.

#### General:

- 3. Before receiving building permits:
  - 3.1 The permittee is to submit a revised site plan and the plan is found to be acceptable.
  - 3.2 The permittee is to submit six prints and a permanent reproducible final site plan as approved by the County Board.
  - 3.3 The construction plans are to comply with the approved plans.
  - 3.4 The final plat(s) is/are approved by the County Board.
  - 3.5 The County Board approves associated requests:
    - 3.5.1 West Yankee Hill Acres Preliminary Plat #04029.
    - 3.5.2 A waiver to the sidewalk, street lights, landscape screen, stormwater detention, cul de sac length and street tree requirements since the area is of larger lots, a rural nature and the subdivision will not be annexed.
    - 3.5.3 A modification to lot area, frontage and setbacks as part of the CUP.

- 3.5.4 A modification to the requirements of the land subdivision resolution to permit a block length in excess of 1320' along the north, south, east and west perimeter of this subdivision.
- 3.6 The County Engineer has approved:
  - 3.6.1 An agreement for street maintenance.

#### STANDARD CONDITIONS:

- 4. The following conditions are applicable to all requests:
  - 4.1 Before occupying this Community Unit Plan all development and construction is to comply with the approved plans.
  - 4.2 Before occupying this Community Unit Plan, City/County Health Department is to approve the water and waste water systems.
  - 4.3 All privately-owned improvements are to be permanently maintained by the owner or an appropriately established homeowners association approved by the County Attorney.
  - 4.4 The site plan accompanying this permit shall be the basis for all interpretations of setbacks, yards, locations of buildings, location of parking and circulation elements, and similar matters.
  - 4.5 This resolution's terms, conditions, and requirements bind and obligate the permittee, its successors and assigns.
  - 4.6 The County Clerk is to file a copy of the resolution approving the permit and the letter of acceptance with the Register of Deeds. The Permittee is to pay the recording fee.

#### CONDITIONS FOR PRELIMINARY PLAT #04029:

#### Site Specific:

1. After the subdivider completes the following instructions and submits the documents and plans to the Planning Department office, the preliminary plat will be scheduled on the City Council/County Board agenda: (NOTE: These documents and plans are required by ordinance or design standards.)

- 1.1 Make the corrections requested by the County Engineer in his letter of November 18, 2004.
  - 1) The maximum grade is 7%. SW 112<sup>th</sup> Court has a proposed grade of 8%.
  - 2) The profile of West Yankee Hill Road shall be extended west to show a minimum of 500 feet of sight distance.
  - 3) The grade of SW 112<sup>th</sup> Court will allow water to run north of the 30" culvert instead of running through the culvert.
  - 4) General Note # 11 refers to SW 112<sup>th</sup> Street which should be SW 112<sup>th</sup> Court.
- 1.2 Revise the drawing to show the pipeline easement.
- 1.3 Revise the drawing to show SW 98<sup>th</sup> Street on the Vicinity Map.
- 1.4 Revise note #14 to include waiver of cul-de-sac length.
- 1.5 Show the creek and tree masses and indicate which trees will be retained.
- 1.6 Show the adjoining air strip and approach zone as reflected by the State Department of Aeronautics.
- 1.7 Add the community unit plan to the signature block for the Planning Commission.
- 1.8 Add a note that reflects the airstrip activity and the normal overflights and noise.
- 1.9 Show the minimum opening elevation for each building.
- 1.10 Revise outlot A to reflect a public access easement, not a common access easement.
- 1.11 Revise outlot "A" to provide a future access to Outlot "B" to the south.
- 2. The County Board approves associated requests:
  - 2.1 County Special Permit # 04066 for the Community Unit Plan.

- 2.2 A waiver to the storm water detention, sidewalk, street paving, street lights, landscape screen, cul-de-sac length and street tree requirements since the area is of larger lots, a rural nature and the subdivision will not be annexed.
- 2.3 A waiver to the lot area, setbacks and frontage.
- 2.4 A modification to the requirements of the land subdivision ordinance to permit a block length in excess of 1320' along the north, south, east and west perimeter of this subdivision.

#### General:

- 3. Final Plats will be scheduled on the Planning Commission agenda after:
  - 3.1 Streets, drainage facilities, temporary turnarounds and barricades, and street name signs have been completed.
  - 3.2 The subdivider has signed an agreement that binds the subdivider, its successors and assigns:
    - 3.2.1 To submit to the County Engineer an erosion control plan.
    - 3.2.2 To protect the remaining trees on the site during construction and development.
    - 3.2.3 To submit to lot buyers and home builders a copy of the soil analysis and water report.
    - 3.2.4 To complete the private improvements shown on the preliminary plat.
    - 3.2.5 To maintain the outlots and private improvements on a permanent and continuous basis. However, the subdivider may be relieved and discharged of this maintenance obligation upon creating in writing a permanent and continuous association of property owners who would be responsible for said permanent and continuous maintenance. The subdivider shall not be relieved of such maintenance obligation until the document or documents creating said property owners association have been reviewed and approved by the County Attorney and filed of record with the Register of Deeds.
    - 3.2.6 To relinquish the right of direct vehicular access to West Yankee Hill Road except for S. 112<sup>th</sup> Court and one farm access shown on the plat.

3.2.7 To comply with the provisions of the Land Subdivision Resolution regarding land preparation.

Prepared by:

Mike DeKalb, 441-6370, mdekalb@lincoln.ne.gov Planner December 17, 2004

**APPLICANT:** Brian D Carstens

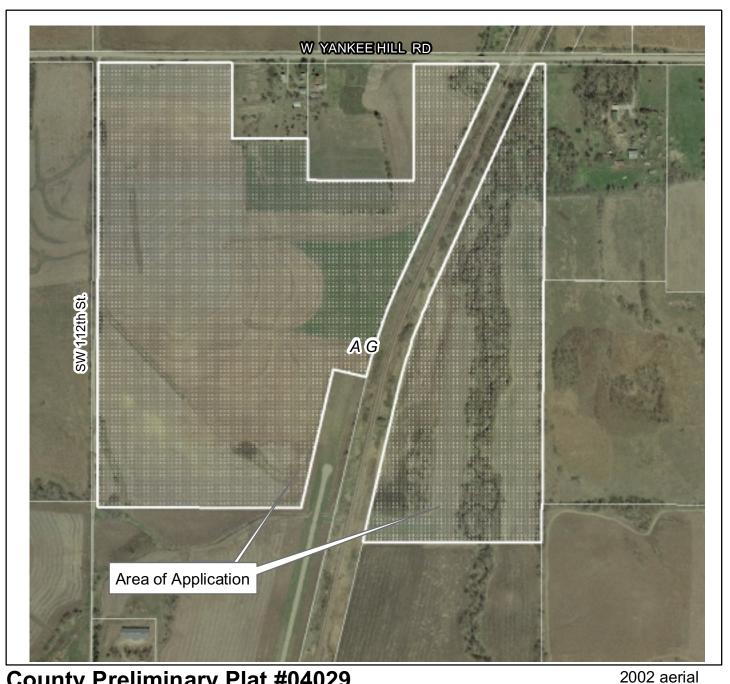
Carstens and Associates 601 Old Cheney Road Lincoln, NE 68512 (402) 434 - 2424

OWNER: Country Plaza LLC

601 Old Cheney Road Lincoln, NE 68512 (402) 421 - 2500

**CONTACT:** Brian D Carstens

Carstens and Associates 601 Old Cheney Road Lincoln, NE 68512 (402) 434 - 2424



## County Preliminary Plat #04029 **County Special Permit #04066** West Yankee Hill Acres W. Yankee Hill & SW 112th St. **Zoning:**

R-1 to R-8 Residential District

AG Agricultural District

AGR Agricultural Residential District R-C Residential Convervation District

0-1 Office District

0-2 Suburban Office District Office Park District O-3

Residential Transition District R-T B-1 Local Business District

B-2 Planned Neighborhood Business District

Commercial District B-3

Lincoln Center Business District B-4 B-5 Planned Regional Business District H-1 Interstate Commercial District H-2 Highway Business District

Highway Commercial District H-3 General Commercial District H-4

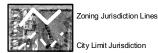
Industrial District Industrial Park District

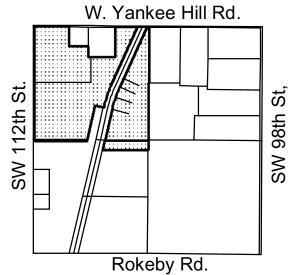
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**Employment Center District** Public Use District

One Square Mile Sec. 28 T9N R5E

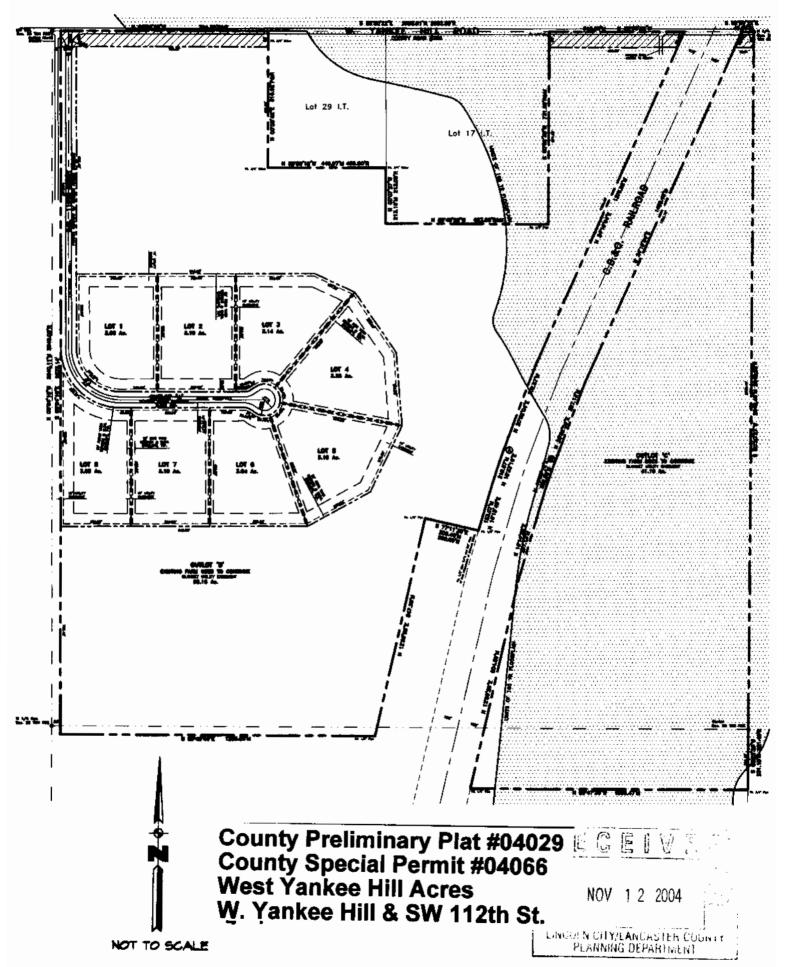




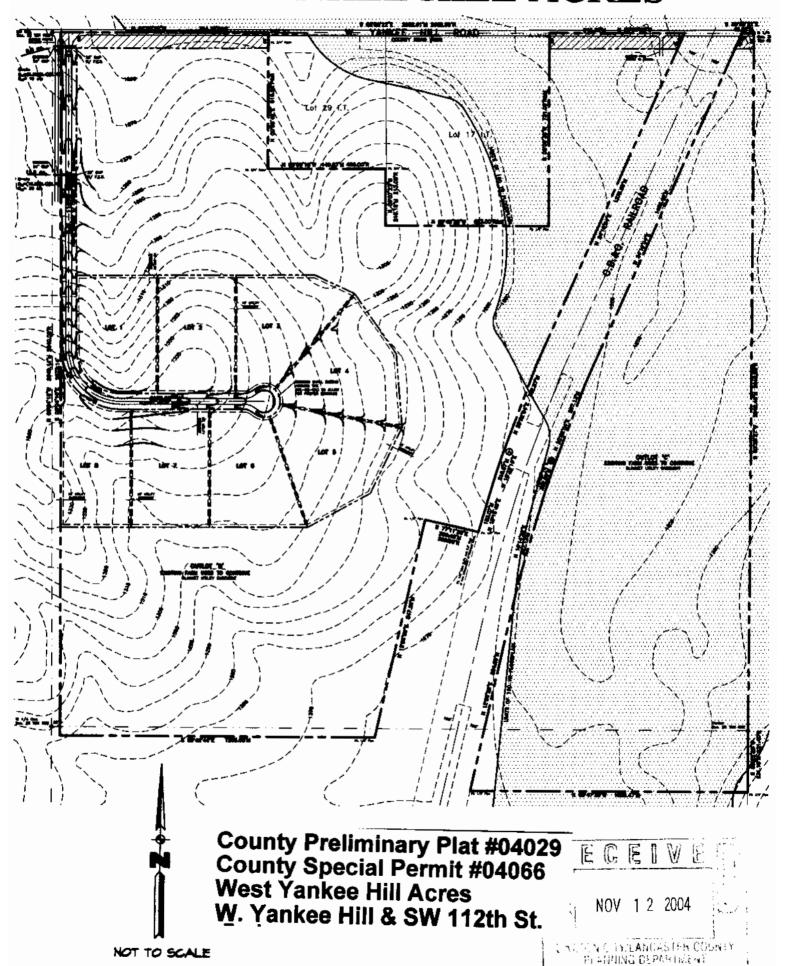


Lincoln City - Lancaster County Planning Dept.

# WEST YANKEE HILL ACRES



# WEST YANKEE HILL ACRES



## GENERAL NOTES

- 1. THIS PRELIMINARY PLAT/ C.U.P. CONTAINS 134.07 ACRES MORE OR LESS.
- THIS PRELIMINARY PLAT/C.U.P. PERMITS 8 SINGLE FAMILY LOTS AND 3 OUTLOTS. EACH LOT SHALL CONTAIN A
  MAXIMUM OF ONE SINGLE FAMILY RESIDENCE AND OUT BUILDINGS, ALL LOCATED WITHIN THE BUILDING
  ENVELOPES AS SHOWN AND/ OR NOTED.
- 3. THE CURRENT ZONING IS 'AG' & THE PROPOSED ZONING IS 'AG'/C.U.P. WITH 20% DENSITY BONUS.
- 4. THE MAXIMUM BUILDING HEIGHT SHALL NOT EXCEED 35 FEET, AS PER 'AG' ZONING.
- 5. THE DEVELOPER/OR OWNER RESERVES THE RIGHT TO BUILD ANYWHERE WITHIN THE BUILDING ENVELOPES SHOWN.
- THE DEVELOPER PROPOSES THE USE OF INDIVIDUAL WATER WELLS FOR POTABLE WATER SUPPLY.
- 7. THE DEVELOPER PROPOSES THE USE OF INDIVIDUAL WASTE WATER SYSTEMS. IF PERCOLATION TEST DO NOT PERMIT SUB SURFACE FIELDS, LAGOONS SHALL BE INSTALLED. WASTE WATER SYSTEMS SHALL BE APPROVED BY THE LANCASTER COUNTY HEALTH DEPARTMENT.
- 8. THE DEVELOPER SHALL CONSTRUCT AND SURFACE THE PRIVATE ROADWAY WITH 3" OF CRUSHED ROCK AND 1" OF GRAVEL IN ACCORDANCE WITH THE LANCASTER COUNTY STANDARDS. THE COUNTY SHALL BE NOTIFIED PRIOR TO THE LAYING OF THE GRAVEL.
- 9. ONLY ONE SUBDIVISION GROUND SIGN SHALL BE PERMITTED FOR THIS DEVELOPMENT.
- 10. ALL CURVILINEAR DIMENSIONS ARE CHORD LENGTHS.
- 11. DIRECT VEHICULAR ACCESS TO WEST YANKEE HILL ROAD IS HEREBY RELINQUISHED EXCEPT FOR S.W. 112TH STREET AND ONE EXISTING FARM ACCESSES.
- 12. ALL TOPOGRAPHIC CONTOURS ARE AT NAVD 88 DATUM.
- 13. EACH LOT SHALL HAVE ONLY ONE RESIDENTIAL ACCESS.
- 14. THE FOLLOWING WAIVERS ARE APPROVED WITH THIS PRELIMINARY PLAT #\_\_\_\_: SIDEWALKS, STREET TREES, STREET LIGHTING, LANDSCAPE SCREENING AND BLOCK LENGTH.
- 15. 'JUNK CARS' SHALL BE PROHIBITED IN THIS DEVELOPMENT AS NOTED IN PROTECTIVE COVENANTS.
- 16. FUTURE LOT OWNERS WILL BE ADVISED THAT THIS IS IN A RURAL FARM AREA AND THAT NORMAL AND CUSTOMARY FARM ACTIVITIES ARE NOT A NUISANCE.
- 17. FARM ACCESSES ARE FOR AGRICULTURAL USES ONLY. ANY OTHER USE WILL FORFEIT AND RELINQUISH THAT ACCESS.
- 18. DEVELOPER SHALL BE RESPONSIBLE FOR INSTALLING THE STREET IDENTIFICATION SIGN, ONE "STOP" SIGN AND ONE "NO OUTLET" SIGN.

## County Preliminary Plat #04029 County Special Permit #04066 West Yankee Hill Acres W. Yankee Hill & SW 112th St.

Δ = 4'38'00" T = 109.42' L = 218.72' Ch = 218.66' ChBrg = N 18'33'16" E

B R = 2504.84'  $\Delta$  = 4'38'00" T = 101.33' L = 202.54' Ch = 202.50'

## OWNERS OF RECORD:

COUNTRY PLAZA, L.L.C. 601 OLD CHENEY ROAD, SUITE 'A' LINCOLN, NE (402)421-2500

## DEVELOPER:

COUNTRY PLAZA, L.L.C. 601 OLD CHENEY ROAD, SUITE 'A' LINCOLN, NE (402)421-2500

## **PETITIONER:**

BRIAN D. CARSTENS
BRIAN D. CARSTENS & ASSOCIATES
601 OLD CHENEY ROAD, SUITE 'C'

## County Preliminary Plat #04029 County Special Permit #04066 West Yankee Hill Acres W. Yankee Hill & SW 112th St.

# LEGAL DESCRIPTION OF C.U.P. PRELIMINARY PLAT:

A survey of Lot 5 and Lot 12, both of Irregular Tracts located in the West ½ of Section 28 Township 9 North Range 5 East of the Sixth Principal Meridian, Lancaster County, Nebraska. More particularly described by metes and bounds as follows.

Commencing at the North ¼ corner of Section 28 Township 9 North Range 5 East of the Sixth Principal Meridian, and the POINT OF BEGINNING; Thence South 00°20'27" West (an assumed bearing) on the East line of the Northwest quarter of Section 28, a distance of 2642.48 feet, to the Center of Section 28; Thence South 00°22'26" West, on the East line of the Southwest quarter of Section 28, a distance of 231.15 feet to the Northeast corner of Lot 13 I.T.; Thence North 89°47'38" West, on the said north line of Lot 13 I.T., a distance of 1059.47 feet, to a point on the Easterly right of way of the Chicago Burlington, and Quincy Railroad (C.B.&Q. R. R.); Thence North 12°56'28" East, on the Easterly right of way of the said C.B.& Q. Railroad, a distance of 804.89 feet; Thence North 16°14'28" East, on said right of way a distance of 297.13 feet; Thence on a curve to the right, having a radius of 2504.84 feet, a central angle of 04°38'00", a chord bearing of North 18°33'16" East, a chord distance of 202.50 feet; Thence North 20°52'04" East, on said easterly right of way, a distance of 297.13 feet; Thence North 24°10'04" East, on the Easterly right of way, a distance of 1458.40 feet to a point on the North line of the Northwest quarter; Thence South 89°50'22" East, on said North line, a distance of 45.97 feet to the POINT OF BEGINNING, and containing a calculated area of 1,794,147.97 Square feet or 41.256 acres more or less.

#### Together with

A survey of Lots 15, 19, and 30 All of Irregular Tracts located in the West ½ of Section 28 Township 9 North Range 5 East of the Sixth Principal Meridian, Lancaster County, Nebraska. More particularly described by metes and bounds as follows.

Commencing at a point on the North line of the Northwest Quarter, said point being 33.00 feet east of the Northwest Corner of Section 28 Township 9 North Range 5 East of the Sixth P.M., and the POINT OF BEGINNING; Thence South 00°04'16" East (an assumed bearing) 33.00 East of and parallel to the West line of Section 28, a distance of 2673.14 feet; Thence South 89\*46'44" East, 33.00 feet south of and parallel to the South line of the Northwest Quarter, a distance of 1203.98 feet, Thence North 12°56'50" East, on the westerly line of Lot 34 Irregular Tract, a distance of 847.26 feet; Thence South 77°11'35" East, on the Northerly line of Lot 34 Irregular Tract, a distance of 209.46 feet to a point on the Westerly right of way of the Chicago, Burlington, and Quincy Railroad (C.B.&Q. R. R.); Thence North 16°15'45" East, on the West line of the C.B.&Q. Railroad, a distance of 153.07 feet to a point of curvature; Thence on a curve to the Right, having a radius of 2704.84 feet, a central angle of 04°38'00", a chord bearing of North 18°33'16" East, a chord distance of 218.67 feet; Thence North 20°52'04" East, on said right of way, a distance of 302.87 feet; Thence North 24°10'04" East, on the westerly line of said railroad a distance of 1375.08 feet, to a point on the North line of the Northwest Quarter: Thence North 89\*50'22" West, on the North line of said Northwest guarter, a distance of 516.23 feet, to the Northeast corner of Lot 17 Irregular Tract; Thence South 00"09'38" West, on the East line of Lot 17, a distance of 731.00 feet, to the Southeast corner of Lot 17 I.T.; Thence North 89\*45'28" West, on the South line of Lot 17 I.T., a distance of 623.00 feet, to the Southwest corner of said Lot 17; Thence North 00°07'27" West, on the West line of Lot 17, a distance of 213.19 feet, to the Southeast corner of Lot 29 Irregular Tract; Thence North 89°50'18" West, on the South line of Lot 29 1.T., a distance of 449.97 feet, to the Southwest corner of Lot 29 1.T.; Thence North 00°08'42" East, on the West line of Lot 29 l.T., a distance of 516.92 feet, to the Northwest corner of Lot 29 l.T.; Thence North 89°50'22" West, on the North line of the Northwest Quarter, a distance of 794.30 feet to the POINT OF BEGINNING, and containing a calculated area of 4,043,024.46 square feet or 92.815 acres more or less.

## SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THIS BOUNDARY SURVEY WAS MADE UNDER MY SUPERVISION AND THAT I AM A LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEBRASKA.



## **BRIAN D. CARSTENS AND ASSOCIATES**

LAND USE PLANNING RESIDENTIAL & COMMERCIAL DESIGN 601 Old Cheney Road, Suite C Lincoin, NE 68512 Phone: 402.434.2424

November 12, 2004

Mr. Marvin Krout
Director of Planning
City of Lincoln/ Lancaster County
555 South 10<sup>th</sup> Street
Lincoln, NE 68508

RE: WEST YANKEE HILL ACRES- PRELIMINARY PLAT/ C.U.P.

Dear Marvin,

On behalf of County Plaza, L.L.C., we submit the following County Preliminary Plat and County Special Permit (C.U.P.) for your review.

West Yankee Hill Acres is located on West Yankee Hill Road, at approximately S.W. 112<sup>th</sup> Street. The site contains 134.07 acres and is currently zoned 'AG'. We are proposing 8 single family acreage lots. Each lot will have its own well and septic system. A graveled private roadway will provide vehicular access to each lot.

We are requesting the 20% density bonus as we are preserving the remaining outlots for farming uses.

We are requesting the customary waivers to the land subdivision ordinance for block length, sidewalks, street trees, street lighting and landscape screening, as each lot is larger than one acre and we are not being annexed into the City of Lincoln at this time.

Please feel free to contact me if you have any further questions.

Sincerely.

Brian D. Carstens

CC: Lyle Loth- Country Plaza, L.L.C.

Enclosures: 24 copies of sheet 1 of 3, 8 copies of sheets 2 and 3 of 3,

Application for a County Preliminary Plat and Special Permit,

Water Report, Certificate of Ownership, Preliminary Soils Analysis.

8-1/2" x 11" reductions of the plans

#### GROUNDWATER REPORT

#### UNAMED RURAL SUBDIVISION

NW1/4 Section 28, Township 9N, Range 5E

#### LANCASTER COUNTY

Engineers: ESP Consulting Engineers
Lyle Loth
Developers: Unnamed
Hydrologist & Preparer of Report:
Richard H. Walker, PE

October 15, 2004



#### Report of Groundwater Investigation Unnamed Subdivision

#### NW1/4 Section 28 Township 9N Range5E

#### Lancaster County Nebraska

#### 1.0 General description of the subdivision

This proposed subdivision is located as stated above and the Northwest corner of this Section, 28, is at the intersection of Yankee Hill Rd. and NW 112<sup>th</sup> St. in the Lincoln Lancaster County street/road system. The subdivision is approximately 9 miles west and 7.5 miles south of Lincoln. The location of the subdivision is shown on Fig.1.

This area is hilly and the plat of the subdivision lots is placed on a fairly level hilltop. With the common areas to be placed in the incised natural channels that surround the building lots. The elevation of the building lot area is approximately 1328 +/-5 Ft. Msl. The eight lots to be developed will be 3+ acres in size. Access to the subdivision will be from SW112th St on the West. The proposed layout of the subdivision is shown with topography on Fig. 2.

#### 2.0 Exploratory Groundwater Investigations

An exploratory well has already been drilled and pump tested on this subdivision site on 6/30/04. This well is located on Figure 2. The driller's log of this well is given as attachment1. A hydro geological report was prepared for this subdivision by Scott Summerside, PG of the UNL- Institute of Natural Resources. The hydrologist has determined from this report and the drillers log that this test well has been drilled and screened into the Dakota sandstone aquifer.

The pumping test conducted by the driller yielded an equilibrium primping rate of 30 GPM for 1 Hr. This is taken as the maximum capacity of this test well.

#### 3.0 Groundwater Quality

Based on Scott Summerfield's previously cited report, the quality of ground water is critical for this subdivision. A water sample was taken at the time of the pumping test and analyzed. The laboratory test results are given in attachment 2

The total Dissolved Solids in this sample are high 710 ppm, but not untreatable. Based upon the TDS and hardness findings of this sample, most users would opt for water treatment.

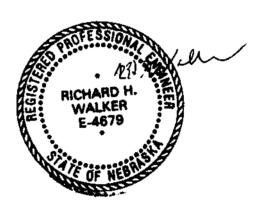
#### 4.0 Ground Water Quantity

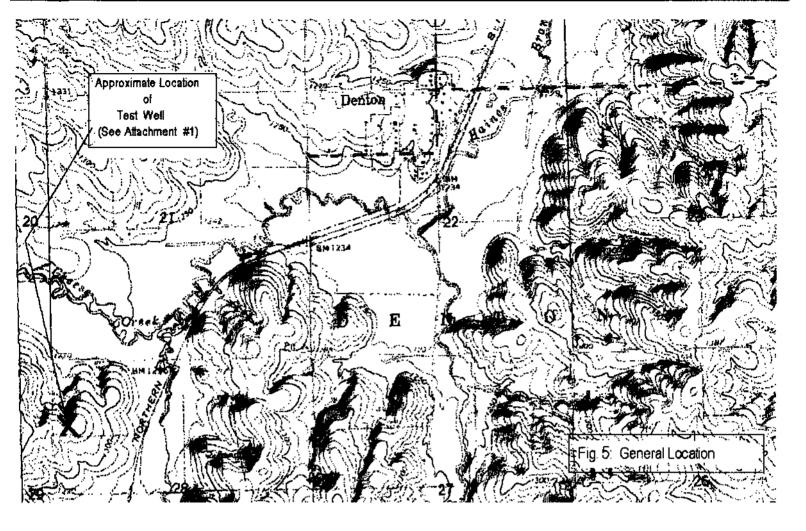
The hydrologist assumes that in this subdivision each lot and/or home will have its own well drilled. Further, based on the well pumping test conducted on the exploratory well, the findings are as follows. Wells can be drilled on all eight lots and they will have a sustainable yield of from 20-25 gpm without resulting in depletion of the aquifer. Because of the topography of the proposed subdivision, all wells will be drilled to similar depths and be screened in length and depth for the same formation, Dakota Sandstone.

#### 5.0 Summary & Conclusions

All of the lots can be supplied by wells of similar design to the one already constructed on the subdivision site. A sustainable yield of 20-25 GPM is possible for all these wells. The resulting groundwater supply is economically treatable to meet accepted water quality standards.

Submitted 10/15/04 By Richard H. Walker, PE Consulting Hydrologist





## **Moser Well Drilling**

Marvin Moser Hickman, NE Allen Moser Hickman, NE

Bill Moser Roca, NE Chris Thornton Hickman, NE

Pumps and Well Supplies - Trenching - Drilling





Hickman, Nebraska 68372 Phone: (402)792-2515 Lincoln: 477-7291 Fax# 792-2922 www.moserwell.com



Date: 6/30/04 Well # 46-04 Driller: Bill Owner/Builder: Lyle Loth	NRD
Location: 3/8 mi. S of S.W. 112th and Yankee Hill Rd E. side	
0- 20 Brown clay 20- 38 Brown sand 38- 40 Tan clay 40-100 Blue clay	Casing Information  Type: pvc Thicknes 200#  Length 191' Diameter: 4"
180-185 Blue and black clay 185-190 Blue clay and rubble	Bore Size 8.5" SWL: 113' M  PWL:  GPM: 20-25 w/air - Well at 30 apm
190-201 Fine sandstone 201-213 Sandy light gray and yellow shale 213-240 Red shale	- for there of pumping. This is max, - Filler Pack: 25-185'  Grout: 6-25'
240-260 Very fine white sandstone	Screen  Length: 10' Diameter 4"  Type: pvc wop  Slot: .020  Area of Screen: 191-201'  Pack: 185-202'  Type of Pack: 16/30 Badger Sand
	Total Chlorides  Sodium:  Hardness:  Nitrates:  Bacteria:
Lat. Degrees         40         Minutes         43         Seconds         24           Long. Degrees         96         Minutes         52         Seconds         21,2	Iron: Dl ppm
State	T.N. 9 R.E. 5 SECT. 28



624 Peach Street Lincoln, NE 68502 Tel- 402-4/0-2811 www.ag.mdsharris.com

**REPORT OF ANALYSIS** 

Water Sample Of

Submitted By

Moser Weil Co PO Box 308

Hickman. NE 68372

Submitted For LYLE LOTH

Date Received	Date Reported	Samples Will Be Stored Until	Laboratory No.
7-Jul-04	9-Jul-04		4702598

REPORT OF ANALYTICAL R	ESULTS		
Client Sample Identification Analysis  WATER WELL OF S.W. 112 + W. YORKER WILL Par	Result		
Water pH Hardness Blcarbonate Carbonate Electrical Conductivity Total Dissolved Salts	7,9 374.9 346.0 0 1,11 710	ppm ★ ppm ppm mmhos/cm ppm ★	
Sodium Calcium Magnesium Potassium	55 89 37 15	ppm ppm ppm ppm ¥	
Sulfate Nitrate-N Chloride Boron Phosphate	243 0.164 7 0.30 0.01	ppm * ppm ppm ppm ppm	
Manganese Iron	0.20 0.01	ppm <b>∦</b> ppm	



Institute of Agriculture and Natural Resources

Conservation and Survey Division 113 Nebraska Hall 901 North 17th Street Lincoln, NE 68588-0517 Telephone (402) 472-3471

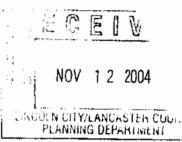
Geological and Natural Resources Surveys



July 9, 2003

Mr Lyle Loth, P.E. ESP, Inc. 601 Old Cheney Road Suite A Lincoln, NE 68512

Dear Mr. Loth:



This letter is in response to your enquiry regarding ground water conditions in the vicinity of a proposed rural subdivision located in the NW 1/4 of section 28, Township 9N Range 5E, Lancaster County. No hydrogeologic information such as well logs or water quality was submitted with your letter and we have none available from this location in our files. Consequently, the following discussion is based on information from wells in the vicinity of the proposed development.

Most wells in the area obtain their water from sandstone of the Dakota Aquifer. The depth to the top of the Dakota is likely from 100 to 200 feet at the site. The Dakota aquifer is overlain by fine-grained, low permeable glacial till and loess. Some wells to the south obtain their water from sand and gravel deposits that overlie the Dakota in that area. The thickness of the Dakota aquifer is not known in this area, but sandstone is likely present under the site. Although no guarantee can be made for all home sites, sufficient quantity of water is likely to be available for individual domestic wells of low capacity. Expected well depths on this property will be about 200 to 250 feet. The depth to water in the wells could be highly variable depending on well depth and location, ranging from very shallow along Haines Branch to over 120 feet on the upland areas. Conditions in this aquifer can change within short distances based on the amount of sandstone present in the formation. According to my professional opinion, it is likely that sufficient Dakota sandstone is present beneath the proposed acreages, but not a 100 percent certainty.

The greater concern is the natural water quality in the aquifer at this location. Although water quality is variable according to location and well depth in the area, saline ground water will probably be encountered at this location. Highly mineralized water has been found in many wells in the Denton area. Reports of TDS concentrations (salinity) of 1000-2000 ppm or more are not uncommon. This information is based on water samples from wells in small acreage developments in the area (Windsor Ridge West, Denton Hills Prairie, Cedar Haven) as well as from wells from individual properties in the area. Old wells in Denton and test drilling for the town of Denton has also encountered saline water at depth.

In order to minimize the risk of the highest salinity ground water, wells should be screened in the first saturated sand or sandstone of sufficient thickness encountered during drilling. It is possible that salinity levels (TDS) could be high enough to make home water treatment expensive, difficult, and possibly prohibitive. Test wells and water samples should be taken prior to development in order to have information available to prospective landowners as to the water quality problems that exist.

In summary, although there can be no guarantee that an adequate supply of ground water can be developed on all properties, it is likely that water quantity is not a problem for the proposed development. However, water quality could be poor or even objectionable for domestic use. A solution to the uncertainty could involve analyses of water samples from nearby wells as well as the drilling of testholes and/or test wells on the properties prior to sale of land and beginning of home construction in order to provide some assurance of an adequate water supply.

Please let me know if I can be of any further assistance. If you have any questions or concerns, please call me at 472-7541.

Sincerely,

Scott Summerside, P.G.

Dest Summerite

Associate Geoscientist

#### **Ground Water Constituents**

Ground Water Constituents	Sample Results	Recommended Drinking Water Limits	Recommended Livestock Limits	Recommended Crop Limits
Sample Date		-	-	-
Total Well Depth (feet)		- ·	<u>-</u>	
Specific Conductance (us\cm)		700-800	7500	750-1500
pH (S.U.)		6.5-8.5		
Hardness (mg\L)		350-500		
Alkalinity (mg\L)		>60		<del></del>
Calcium (mg\L)				<u> </u>
Magnesium (mg\L)				
Sodium (mg\L)		20		-
Potassium (mg\L)				
Sulfate (mg\L)		250		
Chloride (mg\L)		250	1000-3000	350
Fluoride (mg\L)		2.0	2.0	1.0
Silica (mg\L)		50-100		
Iron (mg\L)		0.3		5
Manganese (mg\L)		0.05		0.2
Total Dissolved Solids		500	5000	500-1000
(mg\L)				
Nitrate-Nitrogen (mg\L)		10	45	
Radon (pCi\L)		300		

<u>Pesticides analyzed for were</u>; Acetochlor, Alachlor (Lasso), Ametryn, Atrazine (Aatrex), Benfluralin (Balan), Butachlor, Butylate (Sutan), Chlorpyrifor (Dursban or Lorsban), Cyanazine (Bladex), Dimethenamid, De-ethylatrazine, De-isopropylatrazine, EPTC (Eptam, Eradicane), Ethalfluralin (Sonalan), Fonofos (Dyfonate), Metolachlor (Dual), Metribuzin (Sencor), Pendimethalin (Prowl), Phorate (Thimet), Prometon (Pramitol), Prometryn, Propachlor (Ramrod), Propazine (Milogard), Simazine (Princep), Terbufos (Counter), Triallate (Far-go), and Trifluralin (Treflan).

us\cm = microsiemens per centimeter

mg\L = milligrams per liter (equivalent to parts per million, ppm)

ug\L = micrograms per liter (equivalent to parts per billion, ppb)

pCi\L = pico Curies per liters

Source, Lower Platte South NRD, Dec 2003

## A-4. Common Ground-Water Quality Problems

Constituent	Source	Type of Problem	USEPA* Primary Drinking Water Standards	USEPA+ Secondary Drinking Water Standards
		Inorganic Constituents ———		
Arsenic	Naturally occurring:	Toxic	0.05 mg/L	
Fluoride	Naturally occurring	Stains teeth, can cause tooth damage at high levels	2.4 mg/L	
Hydrogen sulfide	Naturally occurring	Offensive odor, flammable, corrosive	.•	0.05 mg/L
Iron	Naturally occurring	Stains plumbing fixtures and laundry, causes tastes		0.3 mg/L
Manganese	Naturally occurring	Discolors laundry and plumbing fixtures, causes tastes		0.05 mg/L
Nitrate	Fertilizer and fecal matter	Toxic to infants	10 mg/L (as nitrogen)	
Radioactivity	Naturally occurring	Cancer-causing	Gross alpha activity (15 pCi/L) Radium 226 and 228 (5pCi/L)	
Sodium	Naturally occurring	May contribute to high blood pressure		Being investigated
Sulfate	Naturally occurring	Laxative effect		250 mg/L
Total dissolved solids	Naturally occurring	Associated with taste, scale formation, corrosion, hardness	(	500 mg/L
		Organic Constituents —		· · ·
Pesticides and herbicides	Agricultural and industrial contamination	Many are toxic, cause tastes and odors	Several are regulated	
Solvents	Industrial contamination	Many are toxic, cause tastes and odors	Being developed	
<del></del>	Mic	crobiological Constituents ———		
Disease-causing microorganisms	Fecal contamination	Cause variety of illnesses	Coliform bacteria are regulated as indicator organism	
Iron bacteria	Contamination from surface	Produce foul smelling slimes, which plug well screens, pumps, and valves		:
Sulfate-reducing bacteria	Contamination from surface	Produce foul smelling and corrosive hydrogen sulfide		

<sup>\*</sup>State regulations may be more restrictive.

†Not enforceable at federal level.

‡The naturally occurring elements can also be present due to man-made contamination.

#### LINCOLN-LANCASTER COUNTY HEALTH DEPARTMENT INTER-OFFICE COMMUNICATION

TO: Mike DeKalb DATE: November 19, 2004

**DEPARTMENT:** Planning FROM: Chris Schroeder

ATTENTION: DEPARTMENT: Health

CARBONS TO: EH File SUBJECT: West Yankee Hill Acres

EH Administration SP #04066 PP #04029

The Lincoln-Lancaster County Health Department (LLCHD) has reviewed the proposed development with the following noted:

- According to the LLCHD's Geographic Information System (GIS) data, an underground petroleum pipeline is very close to this proposed development. The current site plan does not depict this underground pipeline or its easement. Before comment further on this issue, the LLCHD requests a revised site plan depicting the exact location of this underground pipeline.
- The LLCHD notes that a rail line is located approximately 500 feet from this proposed development. Noise pollution can be concern when locating residential populations in relative close proximity to rail lines.
- The developer has adequately addressed onsite wastewater treatment issues in the site plan's general notes. Onsite wastewater treatment systems will be subsurface fields or lagoons based on percolation test results.
- The developer proposes the use of wells for potable water supply. A groundwater report dated July 9, 2003 indicates that water quantity is not likely to be a problem. The report indicated that water quality could be poor or even objectionable for domestic use. An additional report dated October 15, 2004 utilizing well data from an exploratory well concludes the groundwater supply is economically treatable to meet acceptable water quality standards.
- During the construction process, the land owner(s) will be responsible for controlling off-site dust emissions in accordance with Lincoln-Lancaster County Air Pollution Regulations and Standards Article 2 Section 32. Dust control measures shall include, but not limited to application of water to roads, driveways, parking lots on site, site frontage and any adjacent business or residential frontage. Planting and maintenance of ground cover will also be

incorporated as necessary.

# <u>Lancasler</u> <u>County</u> E

## DON R. THOMAS - COUNTY ENGINEER



<u>Engineering</u>

DEPUTY- LARRY V. WORRELL

eparlment

DATE:

November 18, 2004

TO:

Mike Dekalb

Planning Department

FROM:

Larry V. Worrell

County Surveye

SUBJECT:

WEST YANKEE HILL ACRES

PRELIMINARY PLAT AND CUP

NOV 1 9 2004 LINCOLN CITY/LANCASTER COUNTY
PLANNING DEPARTMENT

This office has reviewed subject development and would offer the following comments:

- The maximum grade is 7%. SW 112th Court has a proposed grade of 8% 1)
- 2) The profile of West Yankee Hill Road shall be extended west to show a minimum of 500 feet of sight distance
- 3) The grade of SW 112th Court will allow water to run north of the 30" culvert instead of running through the culvert
- General Note No. 11 refers to SW 112th Street which should be SW 112th Court 4)

LVW/DP/cm

SUBDIV.WK/West Yankee Hill Acres - PP and CUP.Mem